

CLAIMS

What is claimed is:

1. A method for data transmission to access from a remote unit via a standard browser at least one automation device, comprising the steps of:
 - a) transmitting the data between the remote unit and the at least one automation device by connecting a data conversion unit therebetween;
 - b) exchanging the data between the at least one automation device and the data conversion unit and between the automation devices according to a first communication protocol;
 - c) exchanging the data between the data conversion unit and the remote unit according to a second communication protocol; and
 - d) causing the data conversion unit to convert the data according to the first communication protocol into the data according to the second communication protocol.
2. The method of claim 1, wherein the first communication protocol enables both markup data transmission and binary data transmission, wherein the devices and units between which data are exchanged decide at the beginning of the data transmission automatically if the data are to be transmitted by markup data transmission or by binary data transmission.

3. The method of claim 2, wherein both the markup data transmission and the binary data transmission of the first communication protocol are instruction-based.
4. The method of claim 2, wherein the markup data transmission can be converted into the binary data transmission and the binary data transmission can be converted into the markup data transmission.
5. The method of claim 2, wherein the data are exchanged between the automation devices by using the binary data transmission of the first communication protocol.
6. The method of claim 2, wherein the data are exchanged between the at least one automation device and the data conversion unit preferably by using the markup data transmission of the first communication protocol.
7. The method of claim 1, wherein quality data are transmitted both in markup data transmission and in binary data transmission, with the quality data determining if the data are to be transmitted between the data conversion unit and the remote unit in markup data transmission and in binary data transmission.

8. The method of claim 1, wherein the second communication protocol is a Web-based, instruction-based protocol.
9. A method for data transmission to access from a remote unit via a standard browser at least one automation device, comprising the steps of:
 - a) transmitting the data between the remote unit and the at least one automation device by connecting a data conversion unit therebetween;
 - b) exchanging the data between the at least one automation device and the data conversion unit and between the automation devices according to a first communication protocol, wherein the first communication protocol enables both markup data transmission and a binary data transmission, wherein the devices between which data are exchanged decide at the beginning of the data transmission automatically if the markup data transmission or the binary data transmission is to be used;
 - c) exchanging the data between the data conversion unit and the remote unit according to a second communication protocol; and
 - d) causing the data conversion unit to convert the data according to the first communication protocol into the data according to the second communication protocol.

10. The method of claim 9, wherein both the markup data transmission and the binary data transmission of the first communication protocol are instruction-based.
11. The method of claim 9, wherein the markup data transmission can be converted into the binary data transmission and the binary data transmission can be converted into the markup data transmission.
12. The method of claim 9, wherein the data are exchanged between the automation devices by using the binary data transmission of the first communication protocol.
13. The method of claim 9, wherein the data are exchanged between the at least one automation device and the data conversion unit by using the markup data transmission of the first communication protocol.
14. The method of claim 9, wherein quality data are transmitted both in markup data transmission and in binary data transmission, with the quality data determining if the data are to be transmitted between the data conversion unit and the remote unit in markup data transmission and in binary data transmission.

15. The method of claim 9, wherein the second communication protocol is a Web-based, instruction-based protocol.
16. A method for data transmission to access from a remote unit via a standard browser at least one automation device, comprising the steps of:
 - a) transmitting the data between the remote unit and the at least one automation device by connecting a data conversion unit therebetween;
 - b) exchanging the data between the at least one automation device and the data conversion unit and between the automation devices according to a first communication protocol;
 - c) exchanging the data between the data conversion unit and the remote unit according to a second communication protocol;
 - d) causing the data conversion unit to convert the data according to the first communication protocol into the data according to the second communication protocol; and
 - e) transmitting quality data in the first transmission protocol, and deciding based on the quality data how data are to be transmitted between the data conversion unit and the remote unit by using the second communication protocol.

17. The method according to claim 16, wherein the first communication protocol enables both markup data transmission and binary data transmission, wherein the automation devices and the data conversion unit between which data are exchanged decide at the beginning of the data transmission automatically if the data are to be transmitted by markup data transmission or by binary data transmission.
18. The method of claim 16, wherein both the markup data transmission and the binary data transmission of the first communication protocol are instruction-based.
19. The method of claim 16, wherein the markup data transmission can be converted into the binary data transmission and the binary data transmission can be converted into the markup data transmission.
20. The method of claim 16, wherein the data are exchanged between the automation devices by using the binary data transmission of the first communication protocol.
21. The method of claim 16, wherein the data are exchanged between the at least one automation device and the data conversion unit by using the markup data transmission of the first communication protocol.

22. The method of claim 16, wherein the second communication protocol is a Web-based, instruction-based protocol.
23. A data transmission device for accessing from a remote unit at least one automation device via a standard browser, comprising a data conversion unit connected between the remote unit and at least one automation device and configured to convert data between a first communication protocol and a second communication protocol, wherein the data are exchanged between the at least one automation device and the data conversion unit and among the automation devices by using the first communication protocol, and wherein the data are exchanged between the data conversion unit and the remote unit according to a second communication protocol.